

Shared Learning

COSTAIN
The Thameslink Programme

 Issue Date: 13th March 2017 - For further info contact sharon.fink@networkrail.co.uk
Issue Number: TLP071 Title: Plant – Person Interface

Overview of Event:

A close call was raised when an observer saw a steel fixer working at the back of an excavator with no managed exclusion zone in place. The operative became aware of the movement of the excavator and quickly removed himself from the area. The excavator was under the control and guidance of a banksman at all times and the movement of the machine was a part of the planned activity to scrape material from the area to expose the pile caps.

General Key Messages:

- People and plant must be segregated with the use of exclusion zones where physically possible or work re-planned to remove the risk when feasible
- Co-ordination of activities in restricted areas must be clearly controlled and briefed
- Banksman must be in the correct position to control the movement of plant

Actions Taken As a Result of the Investigations:

- All Frontline Supervisors, Banksman and Plant Operators were briefed on this particular event and the need for Exclusion Zones to be implemented to manage segregation of plant and people.
- Technology based control system such as the Deadman's switch and Athena communication headsets will be reviewed and suitable systems introduced to improve plant management.
- A point of work risk assessment will be required for all excavator operations that present a risk of workers entering the radius of the machine.
- The management of exclusion zones is under review to establish additional measures that could be implemented to improve this.

Photo of Event :



Causes:

Immediate Cause – The excavator moved approximately 500mm to within 2.5metres of the steelfixer.

Underlying Causes –

- There were no fixed barriers in place to segregate plant and operative interfaces to ensure minimum distances between mobile plant and operatives was maintained to prevent the steel fixing operative from being in a position of danger. Note: the use of fixed Exclusion Zone barriers was considered problematic at the planning stage and it was concluded that these were not a reasonably practicable methodology.
- The banksman, though correctly positioned, was aware of the steelfixer operative but through a lack of judgement failed to remove the steel fixer from a position of risk. The Banksman stated he only allowed the excavator to move 500mm so the excavator would not contact the steel fixer who was 2.5 metres away after the manoeuvre.
- Due to the perceived limited and confined access one operative was deployed to act as banksman. This was incorrect 2 operatives should have been deployed.